



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/685,716	10/11/2000	Andrew R. Cleasby	CIS00-2909	5970

7590

02/14/2005

Barry W. Chapin, Esq.
CHAPIN & HUANG, L.L.C.
Westborough Office Park
1700 West Park Drive
Westborough, MA 01581

EXAMINER

SMITH, PETER J

ART UNIT

PAPER NUMBER

2176

DATE MAILED: 02/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/685,716

Applicant(s)

CLEASBY ET AL.

Examiner

Peter J Smith

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 and 25-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 and 25-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/21/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: amendment filed on 10/21/2004.
2. Claims 1-23 and 25-31 are pending in the case. Claims 1, 13, 24, 25 and 29 are independent claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-23 and 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ingrassia, Jr. et al. (hereinafter "Ingrassia"), US 5,951,652 patented 9/14/1999 in view of Pacifici et al. (hereinafter "Pacifici"), US 6,230,171 B1 filed 8/29/1998.**

Regarding independent claim 1, Ingrassia teaches extracting from a browser, via a capture process on the client computer system that operates in conjunction with the browser, state information associated with the browser and the document contained in the browser, wherein the state information includes at least one session state associated with a browser in fig. 15, 18-19, col. 2 line 50 – col. 3 line 13, col. 5 lines 40-49, col. 6 lines 12-27, col. 16 line 61 – col. 17 line 35, and col. 18 line 61 – col. 21 line 13. Ingrassia does not specifically teach extracting, via a capture process, document state information associated with dynamic changes the document contained in the web browser. Ingrassia teaches storing the state information in at least one content object on the client computer system and transmitting the at least one content

Art Unit: 2176

object from the capture process on the client computer system to a server computer system to maintain a state of the browser in the server computer system in fig. 15, 18-19, col. 2 line 50 – col. 3 line 13, col. 5 lines 40-49, col. 6 lines 12-27, col. 16 line 61 – col. 17 line 35, and col. 18 line 61 – col. 21 line 13. The DTS and Master applets of Ingrassia are responsible for capturing, storing and transmitting the state information to the WTS server which records the information and makes it available to other DTS and Master applets residing in the other client web browsers participating in the collaborative session. Furthermore, the state information is recorded with timing information as discussed in col. 21 lines 7-13 so that the web pages identified by the URLs and the activities performed to the data fields can be duplicated in a time-sensitive manner.

Ingrassia does not specifically teach extracting, via a capture process, document state information associated with dynamic changes the document contained in the web browser. Pacifici teaches capturing document state information by capturing dynamic changes to documents contained in a client web browser and uploading the content to a collaboration server for distribution to other client web browsers in fig. 2-4 and col. 4 line 10 – col. 5 line 7. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Pacifici into Ingrassia to have created the claimed invention. It would have been obvious and desirable to have combined the URL and document data capture process of Ingrassia with the dynamic document change capture process of Pacifici to have created the claimed invention. It would have been obvious and desirable to have combined Ingrassia and Pacifici so that the applet could have recorded both data changes and updates as well as dynamic document

Art Unit: 2176

changes and then transmit the state information to other ^{participants} ~~participates~~ in a collaborative web browsing session via a collaboration server.

IT 2/13/05

Regarding independent claim 13, Ingrassia teaches a memory configured with a browser containing at least one document; an input-output mechanism; a processor; and an interconnection mechanism coupling the memory, the processor and the input-output mechanism in fig. 1-2 and col. 4 line 35 – col. 5 line 6.

Ingrassia teaches extracting from a browser, via a capture process on the client computer system that operates in conjunction with the browser, state information, wherein the state information includes at least one of a session state associated with a browser in fig. 15, 18-19, col. 2 line 50 – col. 3 line 13, col. 5 lines 40-49, col. 6 lines 12-27, col. 16 line 61 – col. 17 line 35, and col. 18 line 61 – col. 21 line 13. Ingrassia does not specifically teach extracting, via a capture process, state information associated with dynamic changes the document contained in the web browser. Ingrassia teaches storing the state information in at least one content object on the client computer system and transmitting the at least one content object from the capture process on the client computer system to a server computer system to maintain a state of the browser in the server computer system in fig. 15, 18-19, col. 2 line 50 – col. 3 line 13, col. 5 lines 40-49, col. 6 lines 12-27, col. 16 line 61 – col. 17 line 35, and col. 18 line 61 – col. 21 line 13. The DTS and Master applets of Ingrassia are responsible for capturing, storing and transmitting the state information to the WTS server which records the information and makes it available to other DTS and Master applets residing in the other client web browsers participating in the collaborative session. Furthermore, the state information is recorded with timing information as

Art Unit: 2176

discussed in col. 21 lines 7-13 so that the web pages identified by the URLs and the activities performed to the data fields can be duplicated in a time-sensitive manner.

Ingrassia does not specifically teach extracting, via a capture process, document state information associated with dynamic changes the document contained in the web browser. Pacifici teaches capturing document state information by capturing dynamic changes to documents contained in a client web browser and uploading the content to a collaboration server for distribution to other client web browsers in fig. 2-4 and col. 4 line 10 – col. 5 line 7. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Pacifici into Ingrassia to have created the claimed invention. It would have been obvious and desirable to have combined the URL and document data capture process of Ingrassia with the dynamic document change capture process of Pacifici to have created the claimed invention. It would have been obvious and desirable to have combined Ingrassia and Pacifici so that the applet could have recorded both data changes and updates as well as dynamic document changes and then transmit the state information to other ^{participants} ~~participates~~ in a collaborative web browsing session via a collaboration server.

Regarding independent claim 25, Ingrassia teaches extracting from a browser, via a capture process on the client computer system that operates in conjunction with the browser, state information associated with the browser and the document contained in the browser, wherein the state information includes at least one of a session state associated with a browser in fig. 15, 18-19, col. 2 line 50 – col. 3 line 13, col. 5 lines 40-49, col. 6 lines 12-27, col. 16 line 61 – col. 17 line 35, and col. 18 line 61 – col. 21 line 13. Ingrassia does not specifically teach extracting, via a capture process, state information associated with dynamic changes the

Art Unit: 2176

document contained in the web browser. Ingrassia teaches storing the state information in at least one content object on the client computer system and transmitting the at least one content object from the capture process on the client computer system to a server computer system to maintain a state of the browser in the server computer system in fig. 15, 18-19, col. 2 line 50 – col. 3 line 13, col. 5 lines 40-49, col. 6 lines 12-27, col. 16 line 61 – col. 17 line 35, and col. 18 line 61 – col. 21 line 13. The DTS and Master applets of Ingrassia are responsible for capturing, storing and transmitting the state information to the WTS server which records the information and makes it available to other DTS and Master applets residing in the other client web browsers participating in the collaborative session. Furthermore, the state information is recorded with timing information as discussed in col. 21 lines 7-13 so that the web pages identified by the URLs and the activities performed to the data fields can be duplicated in a time-sensitive manner.

Ingrassia does not specifically teach extracting, via a capture process, document state information associated with dynamic changes the document contained in the web browser. Pacifici teaches capturing document state information by capturing dynamic changes to documents contained in a client web browser and uploading the content to a collaboration server for distribution to other client web browsers in fig. 2-4 and col. 4 line 10 – col. 5 line 7. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Pacifici into Ingrassia to have created the claimed invention. It would have been obvious and desirable to have combined the URL and document data capture process of Ingrassia with the dynamic document change capture process of Pacifici to have created the claimed invention. It would have been obvious and desirable to have combined Ingrassia and Pacifici so

Art Unit: 2176

that the applet could have recorded both data changes and updates as well as dynamic document changes and then transmit the state information to other ^{participants} ~~participates~~ in a collaborative web browsing session via a collaboration server.

Regarding independent claim 29, Ingrassia teaches obtaining state information from a browser process performing on a first client computer system, wherein the state information includes at least one of a document state and a session state associated with a browser; from within the first client computer system, transmitting the state information from the client computer system to a server computer system; and distributing the state information from the server computer system to at least one participant browser on a second client computer system to allow the participant browser on the second client computer system to re-create the state of the browser process performing on the first client computer system and to enable the participant browser on the second client computer system to enter a collaboration session with the browser process of the first client computer system at a point in the collaboration session defined by the state information in fig. 15, 18-19, col. 2 line 50 – col. 3 line 13, col. 5 lines 40-49, col. 6 lines 12-27, col. 16 line 61 – col. 17 line 35, and col. 18 line 61 – col. 21 line 13. The Master and DTS applets obtain and transmit the browser state information to the WTS server. The WTS server then transmits the state information to the other participant browsers enabling the other participant browsers to re-create the state of the browser process performing on the lead browser.

Ingrassia does not specifically teach extracting, via a capture process, document state information associated with dynamic changes the document contained in the web browser. Pacifici teaches capturing document state information by capturing dynamic changes to documents contained in a client web browser and uploading the content to a collaboration server

Art Unit: 2176

for distribution to other client web browsers in fig. 2-4 and col. 4 line 10 – col. 5 line 7. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Pacifici into Ingrassia to have created the claimed invention. It would have been obvious and desirable to have combined the URL and document data capture process of Ingrassia with the dynamic document change capture process of Pacifici to have created the claimed invention. It would have been obvious and desirable to have combined Ingrassia and Pacifici so that the applet could have recorded both data changes and updates as well as dynamic document changes and then transmit the state information to other ^{participants} ~~participates~~ in a collaborative web browsing session via a collaboration server.

Regarding dependent claims 2, 14, and 26, Ingrassia teaches opening an application programming interface from the capture process to the browser, the application programming interface providing functions that can be performed by a capture process, under control of a processor, to access the state information associated the browser and the document contained in the browser and performing, via the capture process, the functions provided by the application programming interface to access and retrieve the state information on the client system in fig. 15, 18-19, col. 2 line 50 – col. 3 line 13, col. 5 lines 40-49, col. 6 lines 12-27, col. 16 line 61 – col. 17 line 35, and col. 18 line 61 – col. 21 line 13. The DTS and Master applets of Ingrassia provides functions to access the state information associated with the browser and the document contained in the browser.

Regarding dependent claims 3 and 15, Ingrassia teaches document access functions to access a document contained in a browser and browser access functions to access the state information associated with the browser in fig. 15, 18-19, col. 2 line 50 – col. 3 line 13, col. 5

Art Unit: 2176

lines 40-49, col. 6 lines 12-27, col. 16 line 61 – col. 17 line 35, and col. 18 line 61 – col. 21 line 13. In the same cited sections, Ingrassia teaches accessing the document contained within the browser for document tags existing in the document using at least one of the document access functions; copying, into a document content objects, the content associated with each document tag accessed from the document; capturing, via at least one browser access function, at least one application session identifier associated with the document contained in the browser; and copying the at least one application session identifier associated with the document into the document content object. The DTS applet captures data contained in a field, which is identified by tags in the document as well as an application session identifier. The captured data and a captured session identifier are copied into a content object for transmission to the server via the Master applet.

Regarding dependent claims 4 and 16, Ingrassia teaches wherein the document contained in the browser is a hypertext document in the abstract. Ingrassia teaches storing the URL pointing to a hypertext document, but does not specifically teach calling a hypertext access function provided by the application programming interface to obtain each document tag within document; and calling a hypertext retrieval function provided by the application programming interface to obtain hypertext content associated with each document tag in the document; and placing the hypertext content associated with each document tag in the document into the document content object.

Pacifici teaches calling a hypertext access function provided by the application programming interface to obtain each document tag within document; and calling a hypertext retrieval function provided by the application programming interface to obtain hypertext content

Art Unit: 2176

associated with each document tag in the document; and placing the hypertext content associated with each document tag in the document into the document content object in fig. 2-4 and col. 4 line 10 – col. 5 line 7. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Pacifici into Ingrassia to have created the claimed invention. It would have been obvious and desirable to have combined the dynamic hypertext capturing feature of Pacifici into the URL and state data capture process of Ingrassia so that the collaboration could have included both data and dynamic html updates to the web pages being collaboratively viewed. This would have allowed for an increased collaboration ability among the client users.

Regarding dependent claims 5 and 17, Ingrassia does not explicitly teach performing functions to access and retrieve the state information on each document in each document container to access and retrieve the state information associated with each document in each document container. Pacifici does explicitly teach performing functions to access and retrieve the state information on each document in each document container to access and retrieve the state information associated with each document in each document container in col. 5 lines 22-38.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Pacifici into Ingrassia to have created the claimed invention. It would have been obvious and desirable to have used the ability of Pacifici to access and retrieve state information for multiple html documents in multiple containers since web browsing commonly involves the user of multiple windows. This would have allowed the users of the collaboration system to have browsed in a natural manner.

Regarding dependent claims 6 and 18, Ingrassia teaches wherein the state information includes a document state and a session state associated with a browser; and arranging a document state and the session state associated with a browser in a format within the at least one content object, such that the at least one content object associates each document state with a session state associated with a document for each document contained in the browser in fig. 15, 18-19, col. 2 line 50 – col. 3 line 13, col. 5 lines 40-49, col. 6 lines 12-27, col. 16 line 61 – col. 17 line 35, and col. 18 line 61 – col. 21 line 13.

Regarding dependent claims 7 and 19, Ingrassia teaches transmitting the at least one content object from the capture process to a collaboration application performing on the server computer system for distribution to participant browsers in fig. 15, 18-19, col. 2 line 50 – col. 3 line 13, col. 5 lines 40-49, col. 6 lines 12-27, col. 16 line 61 – col. 17 line 35, and col. 18 line 61 – col. 21 line 13. The DTS applets passes the content object to the Master applet which transmits the content object to the WTS server for distribution to the participant browsers.

Regarding dependent claims 8, 20, and 27, Ingrassia teaches detecting an intent to initiate a collaboration session; obtaining the capture process; and operating the capture process to perform the steps of extracting, storing and transmitting such that the capture process captures the state information associated with the browser and the document contained in the browser upon initiation of the collaboration session and transmits the state information to the server computer system such that the server computer system can provide the state information to the other participants of the collaboration system in fig. 15, 18-19, col. 2 line 50 – col. 3 line 13, col. 5 lines 40-49, col. 6 lines 12-27, col. 16 line 61 – col. 17 line 35, and col. 18 line 61 – col. 21 line 13. The client downloads the Master and DTS applets at the onset of the collaboration session so

Art Unit: 2176

that the applets can implement the capture process and transmit the state information back to the server so that the server in turn can provide the state information to the participants of the collaboration session.

Regarding dependent claims 9 and 21, Ingrassia does not explicitly teach obtaining the version of the client browser containing the document in order to determine which capture process to transmit to the client. It was well known at the time of the invention that multiple versions of web browsers may have been used as clients to a server. It was well known that there were more than one company distributing web browsers in high volume and that the web browsers had different versions as the software evolved. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Ingrassia to have sensed the version of the participant browser and transmitted the appropriate capture process applet in the event that more than one version of the applet was required for compatibility reasons.

Regarding dependent claim 10, Ingrassia teaches wherein the capture process is an applet stored on a server and wherein the step of obtaining the capture process includes the step of downloading the applet from the server to the client computer system to capture state information associated the browser and the document contained in the browser in fig. 15, 18-19, col. 2 line 50 – col. 3 line 13, col. 5 lines 40-49, col. 6 lines 12-27, col. 16 line 61 – col. 17 line 35, and col. 18 line 61 – col. 21 line 13.

Regarding dependent claims 11 and 22, Ingrassia teaches setting a document property of each document contained in a browser to a common value in response to detecting the intent to initiate a collaboration session in fig. 9 and col. 12 lines 44-48. The documents involved in the collaborative browsing are synchronized to the same session ID and data values.

Regarding dependent claims 12 and 23, Ingrassia teaches using script logic to alter a document domain property of each document contained in the browser to a common domain in fig. 9 and col. 12 line 29 – col. 13 line 64. The Master and DTS applets set the properties of the documents to a common domain.

Regarding dependent claim 28, Ingrassia teaches wherein the capture process computer program logic is an applet that can be served by the server computer system to the client computer system and that can be performed on the client computer system to capture state information related to the browser on the client computer system in fig. 15, 18-19, col. 2 line 50 – col. 3 line 13, col. 5 lines 40-49, col. 6 lines 12-27, col. 16 line 61 – col. 17 line 35, and col. 18 line 61 – col. 21 line 13.

Regarding dependent claims 30 and 31, Ingrassia teaches obtaining, transmitting, and distributing the state information both prior to and after the initiation of the collaboration session between the browser process performing on the first client computer system and a collaboration server and wherein the state information is interim state information that conveys a complete state of the browser process on the first client computer system as it exists during the existence of the collaboration session in fig. 15, 18-19, col. 2 line 50 – col. 3 line 13, col. 5 lines 40-49, col. 6 lines 12-27, col. 16 line 61 – col. 17 line 35, and col. 18 line 61 – col. 21 line 13. The state information is paired with timing information such that entire collaborative web browsing on the participant computers is consistent in a chronological order with the document and data manipulations occurring on the leading browser on the first client computer system.

Response to Arguments

5. Applicant's arguments filed 10/21/2004 have been fully considered but they are not persuasive. Regarding Applicant's argument that neither Ingrassia, Jr. et al. (hereinafter "Ingrassia") or Pacifici et al. (hereinafter "Pacifici") teach the capturing of session state and document state information, the Examiner respectfully disagrees. Ingrassia is directed towards synchronizing data elements, or session state, among a plurality of browsers. The session state is recorded so that the data elements presented on each browser are synchronized among the collaborating browsers. Pacifici is directed towards synchronizing dynamic document changes, or document state information, among a plurality of collaborating browsers. Since both Ingrassia and Pacifici are directed to multi-user online document collaboration, one of ordinary skill in the art at the time of the invention would certainly have knowledge of the teachings, motivations, and advantages of each invention. Therefore, the Examiner believes the combination of the teachings of Ingrassia and Pacifici would have rendered the claimed invention obvious.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2176

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Smith whose telephone number is 571-272-4101. The examiner can normally be reached on Mondays-Fridays 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PJS
2/11/2005


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER